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Communications in Computer and Information Science
Volume 532, 2015, Pages 30-41
14th International Conference on New Trends in Intelligent Software Methodology, Tools, and Techniques, SoMeT 2015; Naples; Italy; 15 September 2015 through 17 September 2015; Code 140719

Mobile application testing in industrial contexts: An exploratory multiple case-study (Conference Paper)

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Abstract

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Recent empirical studies in the area of mobile application testing indicate the need for specific testing techniques and methods for mobile applications. This is due to mobile applications being significantly different than traditional web and desktop applications, particularly in terms of the physical constraints of mobile devices and the very different features of their operating systems. In this paper, we presented a multiple case-study involving four software development companies in the area of mobile and smartphones application. We aimed to identify testing techniques currently being applied by developers and challenges that they are facing. Our principle results are that many industrial teams seem to lack sufficient knowledge on how to test mobile applications, particularly in the areas of mobile application life-cycle conformance, context-awareness, and integration testing. We also found that there is no formal testing approach or methodology that can facilitate a development team to systematically test a critical mobile application. © Springer International Publishing Switzerland 2015.

Author keywords

Case study Mobile applications Software testing

Indexed keywords

Engineering controlled terms: Application programs Life cycle Mobile computing Mobile devices Mobile telecommunication systems Software design Software testing Testing

Context- awareness
Desktop applications
Development teams
Industrial context
Mobile application testing
Mobile applications
Multiple-case study
Physical constraints

Engineering main heading: Integration testing

ISSN: 18650929
ISBN: 978-331922688-0
Source Type: Book series
Original language: English

DOI: 10.1007/978-3-319-22689-7_3
Document Type: Conference Paper
Volume Editors: Fujita H.,Guizzi G.
Sponsors:
Publisher: Springer Verlag

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